AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An isolated protein selected from the group consisting of (C) and (D), wherein:

(C) is a protein having the amino acid sequence of SEQ ID NO: 15,

(D) is a protein consisting of an amino acid sequence that includes substitution, deletion, insertion, or addition of one to ten amino acids in the amino acid sequence of SEQ ID NO: 15, and has activity to produce a dipeptide from an L-amino acid ester and an L-amino acid.

2. (Previously Presented) An isolated protein selected from the group consisting of (E) and (F), wherein:

(E) is a protein having the amino acid sequence of SEQ ID NO: 17,

(F) is a protein consisting of an amino acid sequence that includes substitution, deletion, insertion, or addition of one to ten amino acids in the amino acid sequence of SEQ ID NO: 17, and has activity to produce a dipeptide from an L-amino acid ester and an L-amino acid.

3. (Currently Amended) An isolated DNA selected from the group consisting of (c) and (d), wherein:

(c) is a DNA consisting of nucleotides 486 to 1496 of SEQ ID NO: 14,

(d) is a DNA that hybridizes under stringent conditions with a DNA consisting of a nucleotide sequence complementary to nucleotides 486 to 1496 of SEQ ID NO: 14, and encodes a protein having activity to form a dipeptide from an L-amino acid ester and an L-amino acid, wherein said stringent conditions comprise washing at 60°C and at a salt concentration equivalent to ~~1×SSC~~ 0.1×SSC and 0.1% SDS.

4. (Currently Amended) An isolated DNA selected from the group consisting of (e) and (f), wherein:

(e) is a DNA consisting of nucleotides 311 to 1279 of SEQ ID NO: 16,

(f) is a DNA that hybridizes under stringent conditions with a DNA consisting of a nucleotide sequence complementary to nucleotides 311 to 1279 of SEQ ID NO: 16, and encodes a protein having activity to form a dipeptide from an L-amino acid ester and an L-amino acid, wherein said stringent conditions comprise washing at 60°C and at a salt concentration equivalent to ~~1×SSC~~ 0.1×SSC and 0.1% SDS.

5. (Currently Amended) The DNA according to claim 3, wherein said DNA is said DNA that hybridizes under said stringent conditions with a DNA consisting of a nucleotide sequence complementary to nucleotides 486 to 1496 of SEQ ID NO: 14.

6. (Currently Amended) The DNA according to claim 3, wherein said DNA is said DNA that hybridizes under said stringent conditions with a DNA consisting of a nucleotide sequence complementary to nucleotides 311 to 1279 of SEQ ID NO: 16.

7. (Original) A recombinant DNA comprising incorporated therein the DNA according to claim 3.

8. (Original) A recombinant DNA comprising incorporated therein the DNA according to claim 4.

9. (Original) A recombinant DNA comprising incorporated therein the DNA according to claim 5.

10. (Original) A recombinant DNA comprising incorporated therein the DNA according to claim 6.

11. (Previously Presented) A transformed host cell comprising incorporated therein the DNA according to claim 3, wherein said host cell expresses a protein encoded by said DNA and wherein said host cell is selected from the group consisting of a bacterial cell, an *Actinomyces* cell, a yeast cell, a mold cell, a plant cell, and an animal cell.

12. (Previously Presented) A transformed host cell comprising incorporated therein the DNA according to claim 4, wherein said host cell expresses a protein encoded by said DNA and wherein said host cell is selected from the group consisting of a bacterial cell, an *Actinomyces* cell, a yeast cell, a mold cell, a plant cell, and an animal cell.

13. (Previously Presented) A transformed host cell comprising incorporated therein the DNA according to claim 5, wherein said host cell expresses a protein encoded by said DNA and wherein said host cell is selected from the group consisting of a bacterial cell, an *Actinomyces* cell, a yeast cell, a mold cell, a plant cell, and an animal cell.

14. (Previously Presented) A transformed host cell comprising incorporated therein the DNA according to claim 6, wherein said host cell expresses a protein encoded by said DNA and wherein said host cell is selected from the group consisting of a bacterial cell, an *Actinomyces* cell, a yeast cell, a mold cell, a plant cell, and an animal cell.

15. (Previously Presented) A method for producing a dipeptide-forming enzyme, comprising: culturing the transformed host cells according to claim 11 in a medium, and accumulating a protein having activity to produce the dipeptide from an L-amino acid ester and an L-amino acid in the medium and/or in the transformed cells.

16. (Previously Presented) A method for producing a dipeptide-forming enzyme, comprising: culturing the transformed host cells according to claim 12 in a medium, and accumulating a protein having activity to produce the dipeptide from an L-amino acid ester and an L-amino acid in the medium and/or in the transformed cells.

17. (Previously Presented) A method for producing a dipeptide-forming enzyme, comprising: culturing the transformed host cells according to claim 13 in a medium, and accumulating a protein having activity to produce the dipeptide from an L-amino acid ester and an L-amino acid in the medium and/or in the transformed cells.

18. (Previously Presented) A method for producing a dipeptide-forming enzyme, comprising: culturing the transformed host cells according to claim 14 in a medium, and accumulating a protein having activity to produce the dipeptide from an L-amino acid ester and an L-amino acid in the medium and/or in the transformed cells.

19. (Previously Presented) A method for producing a dipeptide, comprising:

expressing said protein encoded by said DNA in the transformed host cell of claim 11, and

contacting said protein with an L-amino acid ester and an L-amino acid to form the

dipeptide, wherein said contacting occurs at a time selected from the group consisting of during culturing when said protein is present in said transformed host cell, following culturing when said protein is present in a treated microbial cell product, following culturing when said protein is in a crude enzyme liquid, and following culturing when protein is purified.

20. (Previously Presented) A method for producing a dipeptide, comprising:

expressing said protein encoded by said DNA in the transformed host cell of claim 12, and

contacting said protein with an L-amino acid ester and an L-amino acid to form the dipeptide, wherein said contacting occurs at a time selected from the group consisting of during culturing when said protein is present in said transformed host cell, following culturing when said protein is present in a treated microbial cell product, following culturing when said protein is in a crude enzyme liquid, and following culturing when protein is purified.

21. (Previously Presented) A method for producing a dipeptide, comprising:

expressing said protein encoded by said DNA in the transformed host cell of claim 13, and

contacting said protein with an L-amino acid ester and an L-amino acid to form the dipeptide, wherein said contacting occurs at a time selected from the group consisting of during culturing when said protein is present in said transformed host cell, following culturing when said protein is present in a treated microbial cell product, following culturing when said protein is in a crude enzyme liquid, and following culturing when protein is purified.

22. (Previously Presented) A method for producing a dipeptide, comprising:

expressing said protein encoded by said DNA in the transformed host cell of claim 14, and

contacting said protein with an L-amino acid ester and an L-amino acid to form the dipeptide, wherein said contacting occurs at a time selected from the group consisting of during culturing when said protein is present in said transformed host cell, following culturing when said protein is present in a treated microbial cell product, following culturing when said protein is in a crude enzyme liquid, and following culturing when protein is purified.

23. (Original) The method for producing a dipeptide according to claim 19, wherein the L-amino acid ester is one or more types selected from the group consisting of an L-alanine ester, a glycine ester, an L-valine ester, an L-isoleucine ester, an L-methionine ester, an L-phenylalanine ester, an L-serine ester, an L-threonine ester, an L-glutamine ester, an L-tyrosine ester, an L-arginine ester, an L-aspartic acid-α-ester, an L-aspartic acid-β-ester, an L-leucine ester, an L-asparagine ester, an L-lysine ester, an L-aspartic-α,β-dimethyl ester and an L-glutamine-γ-ester.

24. (Original) The method for producing a dipeptide according to claim 20, wherein the L-amino acid ester is one or more types selected from the group consisting of an L-alanine ester, a glycine ester, an L-valine ester, an L-isoleucine ester, an L-methionine ester, an L-phenylalanine ester, an L-serine ester, an L-threonine ester, an L-glutamine ester, an L-tyrosine ester, an L-arginine ester, an L-aspartic acid-α-ester, an L-aspartic acid-β-ester, an L-leucine ester, an L-asparagine ester, an L-lysine ester, an L-aspartic-α,β-dimethyl ester and an

L-glutamine-γ-ester.

25. (Original) The method for producing a dipeptide according to claim 21, wherein the L-amino acid ester is one or more types selected from the group consisting of an L-alanine ester, a glycine ester, an L-valine ester, an L-isoleucine ester, an L-methionine ester, an L-phenylalanine ester, an L-serine ester, an L-threonine ester, an L-glutamine ester, an L-tyrosine ester, an L-arginine ester, an L-aspartic acid-α-ester, an L-aspartic acid-β-ester, an L-leucine ester, an L-asparagine ester, an L-lysine ester, an L-aspartic-α,β-dimethyl ester and an L-glutamine-γ-ester.

26. (Original) The method for producing a dipeptide according to claim 22, wherein the L-amino acid ester is one or more types selected from the group consisting of an L-alanine ester, a glycine ester, an L-valine ester, an L-isoleucine ester, an L-methionine ester, an L-phenylalanine ester, an L-serine ester, an L-threonine ester, an L-glutamine ester, an L-tyrosine ester, an L-arginine ester, an L-aspartic acid-α-ester, an L-aspartic acid-β-ester, an L-leucine ester, an L-asparagine ester, an L-lysine ester, an L-aspartic-α,β-dimethyl ester and an L-glutamine-γ-ester.

27. (Original) The method for producing a dipeptide according to claim 19, wherein the L-amino acid is one or more types selected from the group consisting of L-glutamine, L-asparagine, glycine, L-alanine, L-leucine, L-methionine, L-proline, L-phenylalanine, L-tryptophan, L-serine, L-threonine, L-tyrosine, L-lysine, L-arginine, L-histidine and L-glutamate.

28. (Original) The method for producing a dipeptide according to claim 20, wherein the L-amino acid is one or more types selected from the group consisting of L-glutamine, L-asparagine, glycine, L-alanine, L-leucine, L-methionine, L-proline, L-phenylalanine, L-tryptophan, L-serine, L-threonine, L-tyrosine, L-lysine, L-arginine, L-histidine and L-glutamate.

29. (Original) The method for producing a dipeptide according to claim 21, wherein the L-amino acid is one or more types selected from the group consisting of L-glutamine, L-asparagine, glycine, L-alanine, L-leucine, L-methionine, L-proline, L-phenylalanine, L-tryptophan, L-serine, L-threonine, L-tyrosine, L-lysine, L-arginine, L-histidine and L-glutamate.

30. (Original) The method for producing a dipeptide according to claim 22, wherein the L-amino acid is one or more types selected from the group consisting of L-glutamine, L-asparagine, glycine, L-alanine, L-leucine, L-methionine, L-proline, L-phenylalanine, L-tryptophan, L-serine, L-threonine, L-tyrosine, L-lysine, L-arginine, L-histidine and L-glutamate.

31. (Original) The method for producing a dipeptide according to claim 23, wherein the L-amino acid is one or more types selected from the group consisting of L-glutamine, L-asparagine, glycine, L-alanine, L-leucine, L-methionine, L-proline, L-phenylalanine, L-tryptophan, L-serine, L-threonine, L-tyrosine, L-lysine, L-arginine, L-histidine and L-glutamate.

32. (Original) The method for producing a dipeptide according to claim 24, wherein

the L-amino acid is one or more types selected from the group consisting of L-glutamine, L-asparagine, glycine, L-alanine, L-leucine, L-methionine, L-proline, L-phenylalanine, L-tryptophan, L-serine, L-threonine, L-tyrosine, L-lysine, L-arginine, L-histidine and L-glutamate.

33. (Original) The method for producing a dipeptide according to claim 25, wherein the L-amino acid is one or more types selected from the group consisting of L-glutamine, L-asparagine, glycine, L-alanine, L-leucine, L-methionine, L-proline, L-phenylalanine, L-tryptophan, L-serine, L-threonine, L-tyrosine, L-lysine, L-arginine, L-histidine and L-glutamate.

34. (Original) The method for producing a dipeptide according to claim 26, wherein the L-amino acid is one or more types selected from the group consisting of L-glutamine, L-asparagine, glycine, L-alanine, L-leucine, L-methionine, L-proline, L-phenylalanine, L-tryptophan, L-serine, L-threonine, L-tyrosine, L-lysine, L-arginine, L-histidine and L-glutamate.

35. – 49. (Canceled)

SUPPORT FOR THE AMENDMENTS

Claims 3-6 have been amended.

Support for the amendment of Claims 3-6 is provided by page 21, lines 12-21.

No new matter has been added by the present amendment.